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Original.

MALTINE WITH COCA WINE IN THE TREATMENT OF DIS- EASES OF THE AIR PAS- SAGES.

BY T. STEVENSON, M. D., NEW YORK.

Some months ago my attention was called to the new combination, maltine with coca wine, and it occurred to me that a coca wine having also food value and containing a digestive ferment, the diastase of the maltine would be of especial advantage in treating the condition of malnutrition and debility, so common in diseases of the nose, throat and lungs. I determined to give it a careful trial, not only in my private practice, but at the Bloomingdale Clinic.

I have been more than gratified with the result and have been impressed with one fact more than any other, and that is that the patients invariably volunteer the statement that they are "feeling better" soon after they begin to take the preparation. Whatever may be our views in regard to the diagnosis, prognosis and pathology of any given case which is under our care, it is surely always important that we do our best to relieve the unpleasant symptoms of the patient, as that is what he seeks our aid for more than anything else.

I append some brief notes of a few cases which illustrate the good results secured by adding maltine with coca wine to whatever local or constitutional treatment the case appeared to need.

Mrs. B—, aged 35, indigestion and nervous prostration; bronchitis. One ounce maltine with coca wine at meals, and at bed time. The indigestion im-

proved promptly; she began to relish her food, could sleep, and ceased to complain of her nervous symptoms. The result was satisfactory in every respect.

Mr. S—, aged 25, phthisis, chronic malaria and mal-nutrition. He had recently been exposed in a malarial district in the South, and his mental depression was so great that it almost amounted to melancholia. I put him on Warburgh's Tincture for the malaria, and gave him an ounce of maltine with coca wine at each meal and at bed time. The mental depression was very much lessened immediately, and all of the symptoms were promptly relieved. He said he could breathe much better, and it was apparent to an observer that the symptoms of "air hunger" were mitigated. This was undoubtedly due to the peculiar effect of the coca.

Miss H—, aged 16; chlorosis and atrophic nasal catarrh. She was put upon the tincture of iron, also local treatment for the catarrhal condition, and maltine with coca wine, as in the above-mentioned cases. All the symptoms improved at once, and she felt very much relieved.

Miss H—, aged 18; anemia, with relaxed vocal cords. She is a public singer, and had been forced to abandon her occupation. I put her on iron and maltine with coca wine. In a few days the symptoms were all improved, the aphonia was entirely relieved, and she was enabled to return to her professional work. The prompt relief of the aphonia was doubtless due to the coca acting as a tensor to the vocal cords. She is in a very enthusiastic frame of mind over the effects of the treatment, and is

very grateful for the relief afforded.

Mrs. S—, aged 58; phthisis. Was unable to take cod liver oil; was very much reduced in strength, and could not assimilate enough nourishment to sustain the vital powers. At the beginning of the treatment she weighed 95 pounds; after taking maltine with coca wine at each meal and at bed time for four weeks, her weight has increased to 112 pounds. She can now eat and sleep well, and is feeling very comfortable.

No. 2074 Fifth avenue.

THE REMOVAL, BY TREPHINE, OF FLUID AS THE RESULT OF ACUTE CEREBRAL MEN- INGITIS, WITH REPORT OF A CASE.

BY B. MERRILL RICKETTS, M. D.

Cincinnati, O.

Read before N. Y. S. Medical Association, Mott Memorial Hall, N. Y. City., Oct. 9, 1894.

While the cranial vault has been the seat of many recent and most wonderful surgical exploits, there does not seem to have been any progress made in draining the arachnoid cavity of fluid as the result of any cause. If so, it has not been my good fortune to see any statement whatever as to the results.

Believing that any abnormal quantity or quality of fluid wherever found should be immediately removed, and having for several years advocated such a procedure, I at last, through the courtesy of Dr. B. F. Beebe, had the opportunity of operating for cerebral pressure in a case of acute cerebral meningitis.

Being unable to find any literature upon the subject, makes it necessary for me to confine myself principally to personal experience. However, a few quotations and remarks will, I believe, be apropos: Cerebral meningitis is both primary and secondary, the primary being principally due to trauma, while the secondary follows some local or general infectious disease, such as:

1. Tuberculosis.
2. Scarlet fever.
3. Diphtheria.
4. Typhoid fever.
5. Pneumonia.
6. La Grippe.
7. Measles.

8. Whooping cough.

The amount of exudation bears no constant relation to the severity of the symptoms.

Whether the disease be primary or secondary, I maintain that the fluid should be removed just as soon as pressure symptoms manifest themselves. This, of course, can only be done by means of opening the skull and incising the membranes and allowing free drainage, which can only be accomplished by entering the arachnoid cavity over both parietes and cerebellum to either side of the median line.

The questions here arise as to the continuity of the arachnoid—as to whether or not the arachnoid sac is a closed sac.

No person, perhaps, has done more toward settling this much-mooted question than Dr. F. W. Langdon, of Cincinnati. (Medical Record, August 15, 1891, p. 177.)

I herewith append his conclusions:

First. "The arachnoid membrane is a true shut sac, similar in structure and function to the serous membranes of the other great cavities. Its parietal layer is easily separable from the dura at the vertex in the fetus and young infant, but practically inseparable in this region in the adult. At the base of the skull it is demonstrable as a separate membrane, even in the adult. To assert that the parietal layer of the arachnoid is absent, because its subepithelial connective tissue has fused at the vertex with the dura (connective tissue) is as incorrect as to describe the great omentum as one layer of peritoneum, because its original four layers have become matted and adherent.

Second. The arachnoid cavity communicates freely with the sub-arachnoid space by means of two foramina, situated in the visceral arachnoid, one on either side of the medulla. For these I would propose the name "Lunulate Foramina," from their crescentic or lunulated edges, produced by the attachments of fibrous bands, which cross the openings transversely.

Subsequent observations in two instances confirm the presence of the "lunulate foramen." In one of these the basilar process of the occipital and the sphenoid body were cut away from the base and the dura removed, so as to show the foramina in situ, thus excluding the possibility of their artificial

production during the extraction of the brain."

The arachnoid space therefore in the anterior, middle and posterior fosse may possibly be drained from one common opening. This I hardly think probable, as the channel or channels connecting the various arachnoid chambers are in all probability obliterated by the pressure of the abnormal amount of fluid.

In consequence of their collapse it would be necessary to make an opening into the various fossae.

The ventricles could be emptied by aspiration through the cerebri. This could be done as often as is found necessary. I believe that the walls of the ventricles suffer alike with the walls of the arachnoid cavity. However, it is not definitely known as to whether or not they are always associated. The settlement of this question will no doubt have much to do with the course of treatment.

If an abnormal amount of fluid in the arachnoid cavity, as the result of acute cerebral meningitis, is always associated with an abnormal amount of fluid in the ventricles the treatment will be more complicated than when the arachnoid cavity alone is involved. Pressure from any cause, be it solid or fluid matter, will seriously influence the lymphatic system and assimilation of any character.

On July 15 I was called by Dr. Beebe to see a white male child 18 months old convalescing from pertusis. The doctor's first visit was on July 7, although the child had been very much indisposed for two or three days previous. Pulse somewhat rapid, temperature two or three degrees above normal, bowels regular and the urine passed at regular intervals. The pupils were very much contracted, and did not respond to light.

The ordinary remedies for acute cerebral meningitis were given, but the condition rapidly became worse; coma became profound, with inability to take food or move the extremities.

There was at the time of my visit (July 15) retention of urine and small movements from bowels. The respirations were both shallow and rapid, face livid, skin dry, sallow and warm.

There was left facial paresis, indicating that the pressure was the greatest upon the right side; also of the muscles of deglutition, accompanied by a gurgling sound.

Solid or liquid matter of any charac-

ter had not passed the fauces for twenty hours.

Emaciation was extensive and the discharges from the bowels watery.

In the presence of Drs. B. F. and William Beebe, Edwin and Joseph Ricketts, my students Wallingford and Laughlin, I proceeded to first perforate the right parietal one inch from the median line and as far from the lambdoidal suture. An antero-posterior incision was made two inches in length through the integument and periosteum. These membranes were held with retractors, while the bone was penetrated with a chisel, making an olive-shaped opening.

The dura immediately bulged forth in the opening, thus indicating great pressure from within. This membrane had a dark, congested appearance, and where incised gave off a dark, bloody serous discharge. There was no fluid extradural, nor did any escape or seem to be present sub-dural.

However, the moment the arachnoid cavity was opened a clear, straw-colored fluid escaped in large quantities and continued to flow.

Within five minutes the facial paralysis had disappeared, the left leg was drawn up and the left arm thrown across the chest.

The pupil upon the left became dilated and the general condition of the child improved.

I then hastily made a similar opening upon the left side at the corresponding point, in the same manner, both having been made without an anesthetic, the general sensibility being so benumbed.

Fluid of the same character flowed in a similar manner upon opening the arachnoid cavity.

Fifteen minutes had not intervened from the beginning of the first to the ending of the second operation.

At the end of this time the child cried aloud, could move its extremities to any position, moved its head to either side, the gurgling noise in its throat ceased and milk, water and whisky were swallowed with apparent relish.

Artificial heat was applied and warm drinks given, an exceedingly light prepulse was removed and the glans bared.

A large quantity of urine was voided and the general condition of the child entirely changed for the better. It continued to take a sufficient quantity of food and the pulse became less frequent

and with a better volume.

The respirations became thirty, where they had been as high as fifty per minute.

The body was cleansed with warm water and protected with wool.

The fluid continued to flow from either opening into the arachnoid cavity. Its quality continued the same, while the quantity became diminished.

The scalp and periosteum were drawn together with silk worm gut, leaving a small opening at the lowest point for drainage. A 50 per cent. solution of peroxide of hydrogen was used to irrigate the wound and as much of the cavity as could be reached.

At 2 P. M. patient's condition much improved; temperature 102.

2.30 P. M. temperature began to rise.

4 P. M. temperature 106.

Frequent baths were given.

5 P. M. temperature 104.

7 P. M. temperature 104 3-5.

Pulse feeble.

Whisky subcutaneously; also nitrate strychn. gr. 1-40 and nitro-glycerine gr. 1-100. Legs and arms were drawn up at this time, showing sensibility and the power to move extremities.

Evacuation of bowels and bladder.

Condition improved very much.

Pulse and respiration improved and less frequent.

10 P. M. child vomited.

Whisky by rectum.

Nitrate strychn. gr. $\frac{1}{4}$ subcutaneously.

Vomited several times.

Lime water given and vomiting ceased.

Digitalis M. 3 at 6 A. M.

July 10 vomited soon after 9 A. M. A tight and adherent prepuce was removed and urine at once voided to the amount of about 16 ounces.

Temperature fell from 104 to 103 $\frac{1}{4}$.

11 A. M. vomited. Temperature 105 2-5.

1 P. M. continued to vomit occasionally.

Twitching left side. This continued until 4.25 P. M., when dissolution took place. Twenty-eight hours after the operation the flow of fluid was not regular, but continued from the time of operation until death ensued.

I think that the operation should be made in these cases as soon as pressure symptoms manifest themselves.

As it is, nearly all of these cases die without an operation.

The question now is: Will any of them be benefited or cured if operated upon during any particular time in the course of the disease?

Society Reports.

THE TWENTIETH ANNUAL SESSION OF THE MISSISSIPPI VALEY MEDICAL ASSOCIATION WAS HELD AT HOT SPRINGS, ARK., NOVEMBER 20, 21, 22, 23.

Continued from last Number.

Thursday morning session—The first paper of this morning's session was that of Dr. Frank P. Norbury, of Jacksonville, Ill., subject "The Mental Symptoms of Cerebral Syphilis, a Clinical Study." The paper was an interesting one but elicited no discussion.

The next paper, "The Surgical Treatment of Injuries of the Head," by Dr. Chas. B. Parker, of Cleveland, O., suggesting the necessity of exploratory incisions, to investigate certain unfavorable symptoms, and citing interesting experiences.

The paper was discussed by Drs. Link, of Indiana; Ricketts, of Cincinnati; Minney, of Topeka, Kan., and Walker, of Detroit.

Dr. Geo. N. Lowe was excused from reading his paper, "Spot Specialism," except by title, on the grounds of just having had his teeth drawn, and consequent difficulty of enunciation.

Dr. B. Merrill Ricketts, of Cincinnati, made a report of cases, (a) "Castration for Hypertrophied Prostate; (b) Removal of Head of Femur for Dislocation into Lesser Sciatic Notch. (c) Trephine for Pressure as a Result of Fluid in Acute Cerebral Meningitis," discussion by Drs. Moyer, Walker, of Detroit; Walker, of Evansville, Ind., and others.

The next paper was read by Dr. William E. Wirt, of Cleveland, O., "Tumor Albus of the Knee Joint." Before proceeding to discussion the paper of Dr. A. H. Meisenbach, of St. Louis, Mo., "Resection of the Knee for Separation of the Lower Epiphysis of the Femur; a

Case of Two Years' Standing in a Patient 13 Years Old," was called for and read as being of the same class as the preceding paper. This was illustrated with charts, drawings and casts. The papers brought out a prolonged and interesting discussion participated in by Drs. Ricketts, Lamphear and Link.

"Colle's Fracture," was the subject of an interesting paper by Dr. J. E. Link, of Terra Haute, Ind. Dr. Link during the reading exemplified his process of operating in the reduction of the fracture and bandaging by performing the actual work on a subject before the convention.

After an animated discussion the convention adjourned until 2.30 P. M.

Thursday afternoon session—Dr. J. H. Kellogg, of Battle Creek Sanitarium, made a brief talk, illustrated by charts, of deformities of women.

Dr. C. R. Holmes, of Cincinnati, read a paper, "Disease of the Accessory Nasal Cavities," their influence upon the organs of sight. Modern surgical treatment with report of cases. This was the most interesting paper of the afternoon, and was illustrated by a series of charts and a score of parts of skulls showing the frontal sinus, exemplifying the results of diseases in the portions of the head. A number of new ideas were elucidated, which met the approval of the convention.

A practical discussion followed the close of Dr. Holmes' elucidation, participated in by a large number of the physicians in attendance.

"Hydrocele" was the scholarly paper that followed, by Dr. W. C. Weber, of Cleveland, O.

Case of "Traumatic Cataract in Children Treated by Extraction" was an instructive paper, by Dr. James M. Ball, of St. Louis.

Some observations on "Sore Tonsils" was the subject of a most instructive paper by Dr. L. C. Cline, of Indianapolis. This was one of the most important papers presented, inasmuch as it elucidated some new ideas as to the cause and for the cure of the troubles specified.

The experience of the essayist was that in cases where tuberculosis was suspected from the nature of offensive cheese-like globules coughed out when alarming symptoms existed, and quinsy accompanied, the sole cause of the inflammation of the tonsils resulted simply

from these deposits, which removed, and the sores destroyed, the trouble ceases. The discussion following brought out confirming expressions.

"Squint, with Special Reference to an Operation," was a highly scientific paper by Dr. Charles Beard, of Chicago, who illustrated the operation by original blackboard drawings.

THE NEATEST CIRCUMCISION.

Dr. Bransford Lewis, of St. Louis, read a paper before the recent meeting of the Mississippi Valley Medical Association, in which he detailed a method of doing that operation for which he claimed many advantages in celerity, ease and exactitude of performance, and rapidity of healing. The operation was done with the assistance of two instruments, presented by the author, a clamp and prepuce-tractor, which enabled the operator to carry out the following steps of procedure:

1. After cleansing the penis and encircling it with a small rubber band, the prepuce is drawn strongly forward, the traction being applied to its inner surface by means of the serrated tractor, mentioned.

2. The glans penis being repressed, the curved, fenestrated clamp is applied.

3. With these as a support and guide, 10 per cent. cocaine solution is injected between the two layers of foreskin, anterior to the clamp—no danger of cocaine poisoning occurring, since both clamp and rubber constrictor lie between it and the general circulation.

4. After effective anesthesia has been secured, six double length (ten inch) catgut sutures are run clear through the clamp-fenestra and the four layers of foreskin.

5. With strong scissors the latter is cut off with one sweep.

6. Tractor and clamp being removed, the double length sutures being divided, and two additional sutures being placed at the dorsal and frenal sites—previously occupied by the tractor.

7. The vessels are secured and sutures tied all around, making a circumcision that is at once symmetrical, precise and admirable, leading to prompt union and a satisfactory result.

This operation does away with inaccuracy, appended cutting of the mucous layer, and slowness or replacing of suturing, etc. Patients read the newspaper while it is being done.

Drawings illustrating the steps of the procedure and of the instruments (made by the A. S. Aloe Co., of St. Louis) were also presented by the author.

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PHILADELPHIA, DECEMBER 8, 1894.

CAUSTICS IN PERIPHERAL CANCER.

In our last issue we took occasion to call the attention of our readers to novel procedures in the technique of operations for cancerous breast, and we took issue with those who advise an extensive incision, the removal of the pectoral muscles and the making of a wide breach of the auxiliary space.

Now we would call attention to the use of caustics as a substitute for the knife in all accessible localities, notably the lower lip, the mammae, the pelvis or the cervix.

Now if the modern hypothesis were tenable, that cancerous infection is strictly a local process and that in the breast the invasion of the lymphatics of the arm-pit was an invariable coincidence, thereby calling for their removal with the diseased organ; then, indeed, to employ caustics or escharotics here locally would avail nothing, as they reach the gland elements only.

But so eminent an authority as Dr.

Frederick Treves advises that when we amputate the breast enough has been accomplished when we extract within an ellipsis, the adenomatous structures, and only in exceptional cases touch the axilla. And Dr. Butlin, in his excellent manual of operative surgery, restrict the limits of incision to the breast alone.

Every surgeon and every practitioner of any experience at all well knows that cancer destroys life with about as much certainty as quinine cures malaria.

Our operative measures in all, except few and exceptional instances, are but palliative, which, though they may not lead to a permanent cure, produce what Dr. John Chisue, of Edinburgh, designates very appropriately "mental rest." Sir James Paget, in his search for statistics in the British hospitals, in the question of the effect of operations in prolonging life in cancer, found in a vast aggregation of cases that the average cancer, untreated, killed in two years, while those operated on averaged 26 months, a gain of about 60 days.

By the employment of caustics, in approximate cases, we spare the patients the ordeal of an operation, and their innate dread of the scalpel. Besides, as has been long known, though, but lately revived by Coley, the suppurating sore it leaves is less likely to become the seat of a fresh infection than when a clean-cutting operation is done.

Indeed, with his so-called toxics, which are nothing other than chemical irritants, he endeavors to deliberately provoke the formation of pus, and in this manner ferret out the deep recesses of neoplastic elements.

In their order of efficiency and potency, as escharotics come arsenic, the acid-nitrate of mercury, and chloride of zinc. Judiciously employed, they are in a considerable number of cases of surface cancer of infinite value; not imperiling life, locally destructive, and seldom followed by a noticeable scar.

By blending cocaine with the paste as recommended by Robinson its severe irritation is greatly diminished.

REACTION AGAINST ANTITOXINS

A reaction against the unmeasured claims advanced for the curative effects

of Professor Behring's diphtheria serum is setting in rather seriously. The most significant utterance in this respect was made at a meeting on Wednesday last of the Berlin Medical Society, when Dr. Hansemann, an assistant in Professor Virchow's Pathological Institute, as the mouthpiece of Professor Virchow himself, sharply criticised in detail Professor Behring's serum therapeutics. He denied that the serum immunizes human beings, and declared that no sufficient proof had been produced respecting its curative properties. Furthermore, Dr. Hansemann claimed that the effects of serum treatment, in many cases, were dangerous to health and even to life. The statistics thus far obtainable of the results of the serum treatment he pronounced to be unreliable and often misleading.

The lecture was received with great applause from one part of the audience, and with hisses from the other part.

The extension of the serum treatment to other cities at home and abroad, however, is reported to be going on steadily, and the chemical works at Hoechst, near Frankfort, where the serum is manufactured, have been enlarged this week in order to meet the demands for the serum.

Dr. G. H. F. Nuttall, a young American physician, who is now assistant professor of the Hygienic Institute of Berlin, in view of the fact that his share of the discovery of the serum treatment has not apparently been clearly understood, has made the following statement: He studied in 1887 and 1888 under Professor Fluegge, at Breslau, and at Goettingen, and while pursuing experiments in the laboratory he made certain discoveries which enabled him for the first time to demonstrate that blood possesses bactericidal properties.

BAD EFFECTS OF BOXING.

Drs. Carroll, Williams and G. H. Wilton, of Boston, have been trying a few experiments by the way of studying the effect of blows on the jaw. When Dr. Williams struck himself with moderate force with his fist on the right side of his clenched jaw, a slight dizziness and disagreeable sensation resulted, with a momentary acceleration of the pulse. When muscular resistance was offered no effect was produced and there was no alternation of the pulse.

The same blow with a little more violence struck on the side of a relaxed jaw, half way from the point to the angle, produced a decided dizziness and faintness with pain in and around the left ear and disagreeable feelings. The pulse at the wrist had suddenly stopped, then began rapid for a few beats, then slowed to sixty, where it had previously been eighty. Fifteen minutes later the pulse had risen to sixty-eight and the disagreeable sensation passed off.

Mr. O'Connell, the instructor in sparring at the B. A. A., emphasized the importance of keeping the teeth clenched while sparring. He struck himself voluntarily on the jaw, quite violently, with the effect of slowing the pulse 54, producing pain over both ears, which lasted fifteen minutes.

These incomplete experiments give absolute proof of the effect upon the cerebrum to be feared from blows upon the joint or angle of the jaw when so struck, and therefore transmitted to the bones of the cranium. Whether the so-called "knock-out" blow has produced death in the few fatal cases known, the doctors were unable to say.

CHINESE DENTISTRY.

The Chinese dentist makes artificial teeth from the femur of an ox, and inserts them by passing a copper wire through them and fastening to the adjoining teeth.

A FATAL DISEASE AMONG HORSES.

In the vicinity of Cohansey, Salem County, N. J., there is an epidemic of sore throat among the horses, of a diphtheritic nature.

LOOKING FOR DISEASED CATTLE.

In accordance with the rule established by the Philadelphia Board of Health, a number of dairies in Burlington County, N. J., will be inspected quarterly by a competent veterinarian, and all cattle found suffering from tuberculosis will be destroyed.

TAKING THE NECESSARY STEPS.

A Swiss physician says that an average man will in walking make an average of 26,740 steps a day, or 10,000,000 a year. It is presumed that he took proper steps to ascertain his facts.

Surgery.

Under the charge of T. H. MANLEY, M. D., 115 W. 49th St., New York.

REMOVAL OF A DIVERTICULUM FROM THE ESOPHAGUS.

A man 47 years old presented signs of an esophageal pouch, to wit: An immediate return of food when swallowed; the presence of a tumor on the left side of the neck; its augmentation in volume after eating; the escape of gases and aliment through the mouth when it was pressed on. There was no sign of stricture. After some months the interference with deglutition became so marked that he was threatened with starvation.

On June 14, 1894, Mr. Buttin operated. Commencing by making a long incision in the direction of the sterno-mastoid, dividing the omo-hyoid muscle and the superior thyroid artery, the diverticulum was easily reached and excised.

A tube was passed through the wound into the stomach; but the following day the patient removed it himself and took all his food by the mouth.

The fistula in the neck soon closed in and there was no further trouble in deglutition.

Med. and Chir. Trans., LXX., p. 269.

STRANGULATED CRURAL-HERNIA DURING PREGNANCY.

BY DR. GAUDIER, OF LILLE.

Cases of strangulated hernia as an associate factor with pregnancy are very rare. The various works on midwifery make no mention of them. The author says that he can find no other parallel case on record of this accident in the parturient state. Indeed, Berger in his late treatise on surgery declares that the presence of strangulated hernia and pregnancy are incompatible.

Gaudier's patient was 40 years old, entered the emergency service on June 4, 1894, at 2 P. M., with a femoral hernia, which had been down 24 hours. She was advanced in pregnancy, and was expected to be confined in a few days of her 7th child.

All the signs of femoral hernia were

present. The tumor was rather large, hard and highly sensitive. Vomiting was almost constant.

She admitted that she had a hernia of small size, which gave her no inconvenience for six years, for which she never wore a truss. On Sunday, June 10, the day before she entered, while lifting a heavy basket, she suddenly felt something give way in the right groin.

From that time on her condition grew steadily worse. Taxis having entirely failed after repeated efforts, it was decided that a kelo-tomy must be speedily made.

The chief of the obstetrical clinic, on examination of her, said that she was very near confinement, but that labor had not commenced. Here the author minutely details the technique of operation, which varied but little from that generally adopted. He found but little omentum in the sac, though there was an extensive coil of intestine. This was reduced, and a radical operation super-added for the hernia. Five days subsequently she was delivered of a vigorous infant. She left the hospital one month later—July 10—the hernia cured, and her general condition good, though she was advised to wear an abdominal girth until the wound had solidly healed.

—Revue De Chirurgie, Nov. '94.

(Note by the translator.)

If M. Gaudier will examine the "International Clinics for '93," he will then see the cut of a case of strangulated inguinal hernia, in a woman in the eighth month of pregnancy, reported by myself.

She was sent to the hospital for a kelo-tomy, having been subjected to fruitless taxis by her physician. By placing her, with her shoulders well lowered and the hips raised high, I was enabled to reduce the hernia, which was composed of intestine.

Three weeks later she had a normal labor, and when I last saw her, nearly a year since the time of strangulation, the hernia had not yet come down again, though she constantly wears a truss now.

T. H. M.

ECTOPIC TESTICLE—RETRO-VESICAL.

Charry reports a remarkable case of displaced testicle, revealed in an autopsy on a man 39 years old.

The gland was found atrophied, lying flat against the posterior wall of the bladder. The epididymus, though normal in consistence, was found much reduced in volume, and was closely adherent to a fold of the peritoneum. The vas-deferens was coiled on itself, though entirely permeable, and the vesicula-seminales were so developed that there was little doubt left but the displaced organ, in a limited degree at least, preserved its functions.

Paget has lately described a case of testicular non-descent, later followed by serious symptoms.

The case occurred in a boy of 16 years. The testes had not come down on the right side. One day on making a violent muscular effort it was suddenly forced through the inguinal canal into the scrotum. This occurred on November 15. Vomiting set in, with symptoms of collapse. The testes became enormously enlarged and inflamed.

It was evident that the vessels had become strangulated, and gangrene of the organ was impending.

On November 15 Sir James castrated on the affected side, and recovery was prompt.

—Revue Des Sciences Méd., 15 Oct., '94.

RELIEF OF PAINFUL CANCER OF THE TONGUE.

Mordant Baker speaks of the division of the lingual nerve of the tongue in cases of painful cancer, and says that where the extent of induration is considerable, the nerve is difficult to isolate; besides, in many when so divided the relief is not great. Therefore, he recommends the extraction of all the teeth on the affected side. This removes a source of constant irritation, and in his hands has been a very satisfactory procedure—easy of accomplishment and satisfactory in results.

—St. Barth. Hosp. Reports.

CHRONIC SHOULDER DISLOCATIONS.

MM. Verneuil and Ricard report two highly interesting cases of persistent relapse of dislocation of the shoulder after reduction. In one there had been nine relapses in ten months.

In each the deltoid was divided and

the capsule exposed. Now the loose folds of this were picked up and sutured in plaits, thus gathering in all the lax capsule and fixing the head of the bone firmly in position.

In each the union of the incision was prompt, without infection, and good use of the arm followed. After a year there had been no relapse.

Bull. Acad. de Med., 3 Av Avril, 24.

TREATMENT OF RECENT FRACTURES OF THE PATELLA BY ARTHROTOMY AND SUTURE.

By Debralsieux.

The above author recommends that in all cases of fracture of the patella attended with separation an immediate arthrotomy should be performed and the fragments solidly wired. This is particularly desirable in workingmen.

He would only except fat subjects, the diabetic, albuminuric and cachectic. Fourteen cases are reported by him, with good results in all.

In one man who had fractured the patella five months previously, and in which case there were six centimetres of separation, an operation secured solid union with so much restoration of functions that he now could return to his trade with quite perfect use of the former useless limb.

—Amer. Soc. Belg Chir. 15 Jan., '94.

HYSTERECTOMY FOR FIBROUS TUMOR.

Dr. J. W. Long, of Richmond, writes:

1. That in cases of fibrous tumor complicating pregnancy the patient should always be informed of the dangers of pregnancy. 2. Cervical fibroids, whether submucous or interstitial, should always be enucleated if within reach. 3. Subserous fibroids that have small pedicles may be let alone—trusting that they will be pushed aside, and will not take on such rapid growth. 4. Small or medium-sized tumors that show no special disposition to rapid growth may be let alone. 5. Large tumors, especially when multiple or interstitial, demand operative interference. 6. Abortion or induced labor are hardly justifiable (supra). 7. Cesarean section is rarely indicated on account of the high mortality. 8. Myomectomy may be practiced in some instances, when there is only one large tumor and it is situated in the fundus and does not have too broad an attachment to the uterus. 9. When the tumor has a broad attachment, or is situated near the tubes, supra-vaginal hysterectomy is indicated. —Virginia hysterectomy is indicated.

—Virginia Med. Monthly.

Medicine.

Under the charge of E. W. BRIG, M. D., Chester, Pa.

TREATMENT OF TOXIC DYSPNEA IN CARDIAC CASES.

There exists in cases of heart disease a form of dyspnea which depends exclusively on derangement of the renal functions, and which may be termed toxic, in the sense that it is produced by the faulty elimination of toxines formed in the organism. The indications for treatment are to prescribe a diet which will exclude as much as possible substances containing toxines; to neutralize intestinal poisons by antiseptics; to encourage diuresis and thus favor elimination. Milk fulfills all these indications.

Milk should be ordered exclusively and given in quantities of three or four quarts a day. The patient should take about half a pint every two hours in small quantities at a time if necessary. When the dyspnea has disappeared a special diet should be ordered. Vegetables, fresh eggs, very little meat, cheese, preserved foods, substances containing large amounts of toxines are prescribed. Milk should be used in addition; every month for a week, the patient should return to the milk diet exclusively.

During the whole treatment benzonaphthol should be used as an intestinal antiseptic. This is preferable to salol, which is apt to irritate the kidneys. Hydrochloric acid may be given occasionally; to act on arterial tension, vinous or iodide of sodium in small doses; calomel as a purgative, with scammony and jalap is required when indicated.

—Bull. de Therap.

EPITHELIOMA OF SKIN.

Gaveno, of Rome, says that he invariably cures epithelioma of the skin by the application—repeated once, after a week's interval—of

R Fuming nitric acid.....150 grains
Bichloride of mercury... 60 grains
Paper pulp (Berzelius) qs to form a thin paste.

Large epitheliomas yield in a little time, and healing goes on rapidly.

—Bull. de Therap.

The Progres Medicafe issues this month a students' number, which contains a full account of the medical colleges throughout France, with portraits of the faculties and all information bearing on the subjects taught.

MALINGERING.

The simulation of diseases is of old date. David feigned madness, as also did Ulysses and Brutus.

Ambrose Pare recounts the subterfuges of the Paris beggars. The courtiers of Louis XIV feigned fistula like the King, and several were needlessly operated on. With the progress of science and its dissemination simulation has become perfected. Certain malingerers have become very expert, as often seen in military hospitals, and not infrequently in civil hospitals.

At the head of the list of simulated diseases comes the large category of pains—pain in the head, limbs, back, abdomen and everywhere else. Malingerers can generally give a very complete and connected account of their symptoms.

At any consultation one may see individuals come in with face painfully contracted, spine bent, limbs flexed, leaning on a cane and crying out at each step: Diagnosis "sciatica." But since Valleix described the characteristic painful points on nerve tracts many other signs have been discovered. The medical studies of the malingerer have been too rudimentary to permit him to play the part in its entirety. They sometimes are aware that the pain follows exactly the nerve tract.

The old hands know the course of the nerve and situation of Valleix's points frequently better than the students, from the fact that they have so often undergone the examination, but they are not generally acquainted with the other features, as atrophy of the limb, with coldness and violet-tint due to vaso-motor involvement, and loss of sensation. They do not know, either, that the deformity of the trunk, at first temporary, becomes in time permanent.

Skin affections are frequently simulated. In one of the civil hospitals of Paris one patient acquired a universal renown. His skin was dermatographic. Having become acquainted with this peculiarity he resolved to take advantage of it among the hospitals. He produced, just before going to the consultation, the eruption desired by means of a few simple instruments. With a pin he produced a rash simulating urticaria; with the blunt end of a pencil he produced maculae like those of measles. He obtained the patches of "scarlatina" by a special rubbing over the parts of election. Thus prepared, he presented himself with assurance, and was never refused admission. But one day his trick was detected, and he was discharged. He is now making a living by exhibiting himself and his talent.

Among other affections, those of the eyes are frequently simulated. Myopia, astigmatism, blindness, Daltonism, etc. Others pretend to spit blood. Farix is simulated by placing ligatures round the limb and walking quickly. Others blow air under the skin to produce local deformity. The swallowing of small reptiles and vomiting them is a common act. Fever is also imitated.

—Rev. de Therap. Med. Chir.

ANESTHETIC ACTION OF CERTAIN DRUGS ON THE EYE.

Roumel has found that helleborin, courallamarine, strophanthine, adonidine, all produce anesthesia of the eye, as follows:

Helleborin—Two drops of a 1-20 solution, one hour after instillation, produces corneal anesthesia, which reaches its maximum in about six hours and lasts for twenty-four hours. Its inconvenience is the liability to produce conjunctival and pericorneal injection.

Courallamarine—Three drops of solution (1-40) instilled separately, at ten-minute intervals, after forty minutes produce complete corneal anesthesia, lasting for at least six hours. It is liable to the same objections as helleborin.

Strophanthine—One drop of a 1-40 solution at end of half an hour anesthetizes the cornea, lasting about six hours, and adonidine, a solution of 3 or 4 per cent., produces in half an hour complete corneal anesthesia, lasting

several hours. The pupil is not dilated nor otherwise affected more than with the other drugs tried by M. Roumel.

* * *

Exalgine is recommended highly for exophthalmic goitre.

* * *

Viau mentions three cases of ocular diphtheria cured by crude petroleum.

—Rec. d'Ophthalmologie.

* * *

Labordes' method has been successfully employed in the resuscitation of a person apparently dead from chloroform.

—La France Med.

* * *

ICHTHYOL IN CATARRH OF THE URETHRA AND BLADDER.

Villetti, of Rome, is satisfied that in these affections ichthyol has a beneficial action. The gonococci perish rapidly and inflammatory phenomena quickly improve. The drug does not cauterize the mucous membrane, and consequently there is no danger of stricture resulting from its use. It also relieves the pain.

The solution is used in the strength of 3 per. cent as injection.

"BEFORE AND AFTER," A PRECIOUS REMEDY.

Testimonial sent to a manufacturer of pharmaceutical specialties.

"Two months since my wife was taken with hoarseness and difficulty in speaking. Since she has taken your medicine she does not speak at all. Be kind enough to send me two bottles as soon as possible."

—Gaz. di Liege.

DIPHThERIA AND CITRIC ACID.

Dr. H. Laser (Hospitals-Tidende), on account of the destructive influence with citric acid exerts on the micro-organism of diphtheria, has adopted the following treatment in diphtheria: Each hour let the patient gargle with a dilute solution of citric acid, which is prepared by adding a teaspoonful of a 5 to 10 per cent. solution to a glass of water. Besides, have the child suck slices of lemon or drink lemonade, which is prepared by squeezing a lemon into a glass of sweetened water.

"Lancet-Clinic."

Electro-Therapeutics.

Under the Charge of S. H. MONELL, M. D., 44 West 46th St., New York.

THE AMERICAN ELECTRO-THERAPEUTIC ASSOCIATION.

REPORT OF FOURTH ANNUAL MEETING.

THIRD SECTION.

Continued.

Report of fourth annual meeting continued, September 27 (fourth section). What was in some respects the most noteworthy discussion of the entire meeting followed the reading of the next paper by Professor Edwin Houston. His subject was "Electrocution" a grim, but practical text for what proved to be an elaborate and extremely interesting experimental discourse.

M. d'Arsonval some time ago achieved more or less notoriety by charging that electrocuted criminals were killed by the autopsy, and not by the electric current. He made the following statement: "The alternating currents of commerce may cause death in either of two ways: (1) By actual lesion or destruction of tissue; and (2) By arrest of respiration, producing asphyxia. In the former class death is actual, and nothing can restore animation; in the latter (including electrocution) death may be, and at first often is, only apparent, recovery still being possible, and even probable, by a timely resort to artificial respiration.

M. d'Arsonval cited a single case—an accident—to sustain his view that restoration to life after apparent death by electric shock is possible. As this case and d'Arsonval's conclusions have been published many times they need not be repeated here.

No one would dispute the mere fact that accidents are not always fatal, but Professor Houston protested warmly against the unwarrantable assumption that therefore electrocution was never fatal, and that the surgeon's knife was an instrument of murder in every case where an autopsy was held on an electrocuted criminal. Professor Houston indorsed the suggestion that a person

shocked by accident should be treated as a person drowned, but for d'Arsonval to base his sensational statements upon one case only, and to generalize from it that all scientifically performed electrocutions fail, and that doctors kill by the autopsy, is wholly unwarranted and unjust to the medical profession. In the accident cited it is stated that the current had an E. M. F. of 4500 volts, but a resistance of about 6000 ohms was present and the case is not at all comparable to cases of premeditated electrocution. To test the matter, however, Professor Houston and Mr. Kennelly had made a series of experiments upon dogs in their laboratory in Philadelphia. They called to their aid an expert veterinary surgeon, an eminent oculist (to make ophthalmoscopic tests), a specialist in the examination of the heart and lungs, and several other medical authorities, whose ability to ascertain whether the dogs were alive or dead was as much beyond question as human skill can ever be. Every fact connected with the several experiments was recorded accurately. The street current was used.

September 13, 1894. Dog No. 1. Weight, 31½ pounds. Contacts were made through the feet. Resistance, 20,000 ohms. A current was passed for 50 seconds. The voltage, amperage and every detail of the test were carefully noted. The onset of the current caused an instant state of rigidity without sound. An hour was then devoted to the most skillful attempts at artificial respiration and failed to revive the dog. It was the opinion of all present that death had been instant and painless, and this opinion was formed by men who had carefully noted every circumstance. Dog No. 2 was treated for only 20 seconds with a current of 690 volts and one ampere. The effects upon the eye, circulation, etc., were examined and noted. With dog No. 3 the contacts were made through the forelegs, the previous contacts having been through one fore and one hind leg. In this case the resistance was 31,820 ohms. A current of 700 volts, 1.8 amperes was applied for ten seconds. It caused tetanus.

nus at once. One minute later it was determined that death was absolute and without evidence of pain.

The fourth dog received a current of 700 volts through the ears. Resistance 1200 ohms, amperage 6. Rigidity and retal evacuations ensued at once. Wagging of the tail occurred for several seconds. Rolling of the eyes and convulsive movements followed. Nine seconds after shock he appeared conscious, but not suffering. Respiration regular. Ten seconds later reflexes returned; moved himself; lay quietly; nine seconds later, tried to stand; wagged his tail; two seconds later sank into stuporous state, but a second later resonded to call. At 10.46 o'clock, 32 seconds after shock, he was given chloroform, as pain seemed present and died an instant later.

In all these cases death was determined by careful examination to be absolute and final, even with the weaker currents applied.

The conclusions deduced were that (1) the passage of a sufficiently strong alternating current causes instant, painless and absolute death; (2) where electrocution is properly carried out the victim cannot be revived, for he is dead; (3) in accidents, owing to imperfect contacts, high resistance and leakage of the current death may be apparent only, and efforts at resuscitation should be made.

Discussion was opened by Dr. Morton, who stated that while he had never personally witnessed an electrocution, declining such invitations on principle, yet he radically disagreed with the author of the paper. He upheld D'Arsonval's theory, and declared that the burden of proof rested on those who claimed that the criminal was killed by the electricity, and not by the knife. He drew a sentimental picture of the awful horror of being killed by an autopsy, and argued the matter as if no precautions whatever were taken by the State to see that the law was legally satisfied. He advocated leaving the body alone until decomposition set in to prove the fact of death, though he did not state how he would avoid the awful possibility that in this case death might result from starvation.

Mr. Kennelly stated that he had been present at an electrocution, and described the extraordinary precautions taken by expert medical scientists to

be sure the criminal was dead. Autopsies had not been the cause of death, but had conclusively proved that the current had been fatal.

Dr. Robinson reminded the meeting that a superb committee had fully investigated this subject several years ago and had settled the matter. He had also personally attended an electrocution, and he believed the man was dead. He strongly protested against Dr. Morton's stand, declared that he was threshing over old straw, and that to arouse sentimental feeling against this method was an error.

Dr. Newman took strong issue with Dr. Morton. To throw doubts, he said, on such reports as have been given us by eminent and honorable men was to cater to newspaper sensationalism.

Dr. Newman had never seen an electrocution; had no convictions on the subject, but to settle the matter would move that the association ask to have the autopsies delayed until the criminal was determined to be dead (which has always been done, though D'Arsonval ignores the fact).

Dr. Rockwell deemed Dr. Morton's objections puerile. He had seen twenty animals killed, and several criminals electrocuted. He had no doubts on the subject. He concluded that D'Arsonval was seeking notoriety when he published his single case.

The discussion was closed by Professor Houston, with an earnest display of feeling. Had not his side of the case met all of Dr. Morton's visionary objections? Did not men believe in scientific instruments that cannot lie? Dare the society to throw doubt upon the statements of four experts called in by the State to ascertain if the criminal was dead? Those who had never been present were not qualified witnesses in the case. Those who have been present at electrocutions are convinced not only that scientific electrocution is certain death, but that it is also instantaneous and most humane. He regarded Dr. Morton's argument as a dangerous one to follow. In deaths by lightning stroke every effort had failed to revive. Surely no one would claim that an electric current could not kill. All demand for proof to this effect had long since been satisfied, and the society was not justified in taking the matter up at all. He furthermore declared that if the childish resolution offered was argued he

would promptly move to amend it to officially inquire into the certainty of death by hanging and the guillotine.

The above paper has been reported at unusual length because of the clearness with which one of the ablest electricians in America has shown that the present improved method of inflicting capital punishment by strong electric currents is painless, humane and sure. The subject is one upon which physicians should have correct knowledge, and Professor Houston performed a valuable service in disposing of fallacious theories so completely.

Shortly after the discussion of this paper, and possibly growing out of it, a request appears to have been made to the State prison authorities and the Governor to permit an attempt to resuscitate an electrocuted criminal. It was reported that permission could not be given until it was determined who had jurisdiction and legal authority to give it. The law is an act of the Legislature, and explicit in its terms, and reads:

"The punishment of death must in every case be inflicted by causing to pass through the body of the convict a current of electricity of sufficient intensity to cause death, and the application of such current must be continued until such convict is dead."

Further than this Superintendent Lathrop had nothing to say, but some officers of his and other State departments are of the opinion that the subsequent autopsy, concerning which the law reads: "Immediately after the execution a post-mortem examination of the body of the convict shall be made by the physicians present," is part and parcel of the execution, and that the murderer cannot be legally pronounced dead or executed till after the autopsy.

If this be so, and the cutting up process of an autopsy is a part of the execution, there can be no doubt of the final death of the culprit. He will be dead legally and actually.

Also, if the law be thus interpreted no one but the Legislature, which enacted the law, can step in and allow any attempt at resuscitation between the two parts of the execution, the passing through of the electric current and the autopsy.

The subject of possible resuscitation, however, should not confuse any physician. Accidental injuries are very different from carefully completed executions.

A man may have his throat cut in a brawl and live, but an official headman's complete decapitation does not carry with it an equal chance of life. In electrocution the contacts are perfect, the resistance reduced to a minimum, the centres of life are attacked and the application is continued till the convict is dead. In cases of accident the conditions are entirely changed, and if, for instance, the contacts are through the two hands (usually dry) a high resistance does much to protect the man till he is rescued.

If called to such a case a physician should at once attempt restoration. We take pleasure in repeating the following account of complete success following such an attempt:

To the Editor of Electrical Review:

We are in receipt of your favor inclosing the inclosed clipping. In regard to this matter we would say that on October 22 our Mr. J. E. Cutler received a shock from a wire carrying 4500 volts. This pressure is used in our testing department for experimental purposes, and through an accident Mr. Cutler took hold of the two terminals carrying this pressure. He was immediately completely prostrated, and to all intents and purposes was dead, but was revived by the method advocated recently in electrical and other journals by D'Arsonval, of Paris—that is, he was treated exactly as a drowning man would be, and a few minutes of this treatment finally brought him to. He was, of course, prostrated for a time by this accident, but the next day was again attending to his duties as far as his hands would allow him. His hands were quite severely burned by this shock, and it will probably be some time before he obtains complete use of them. There is no doubt in our minds but that Mr. Cutler would not have survived this accident had he not been promptly attended to, and this experience should be of value to those who are liable to come in contact with wires carrying high pressures.

Yours truly,

HENRY HINES,

Stanley Electric Manufacturing Company.
November 2, 1894.

We will now close this paper with three extracts, only remarking that D'Arsonval never witnessed an electrocution.

ACCIDENT VERSUS EXECUTION.

"I found nothing, after the most careful examination, in the lungs, heart or head to explain the cause of death."

—D'Arsonval, Paris, November 19.

"In the last legal execution, at Sing Sing, all the arteries of the brain were apparently ruptured, the heart entirely empty and the lungs nearly so. Under such circumstances life must be absolutely non-existent a moment after the first shock."

—G. C. C., M. D., a State witness, New York, November 20.

"The words of the law are so clear and explicit that electricity must be so applied and continued as to deprive the convict of life, that there is no necessity of any comment upon the language used."

—Attorney General Hancock to Governor Flower, November 21, 1894.

(To be continued.)

Miscellany.

THE OBSTETRICAL SOCIETY OF CINCINNATI.

This society will hold a series of meetings for the discussion of the uterine reflexes, to which the medical profession is cordially invited, the first, second and third Thursday evenings in December. A number of local specialists outside of the society have consented to read papers, which will follow each other as nearly as possible in the order named, and are as follows:

"Changes in the Cord from Reflex Irritation," B. K. Rachford, M. D.

"Pathological Condition Produced by the Menstrual Wave," A. W. Johnstone, M. D.

"Neurasthenia Cordis," J. T. Whitaker, M. D.

"Hysterical Manifestations of the Chylo-Poetic System," F. Forcheimer, M. D.

"Hysterical Manifestations of the Muscles and Joints," P. S. Conner, M. D.

"Hysterical Manifestations of the Cord," Joseph Eichberg, M. D.

"Hysterical Manifestations of the Brain," A. B. Richardson, M. D., Columbus.

"Hystero-Epilepsy," Thad. A. Reamy, M. D.

"The Influence of Ovarian Disease on Insanity," C. A. L. Reed, M. D.

"Reflexes of Male Pelvis," Joseph Ransohoff, M. D.

"Reflexes from the Testicle," N. P. Dandridge, M. D.

"Eye Reflexes," S. C. Ayres, M. D.

"Ear Reflexes," C. R. Holmes, M. D.

"Larynx Reflexes," A. B. Thrasher, M. D.

"Nasal Reflexes," T. V. Fitzpatrick, M. D.

THOS. P. WHITE, M. D.,
E. S. M'KEE, M. D. President.
Secretary.

CAT ELECTRICITY.

The London Lancet says, apropos of the recent cat show:

"The electrical effect produced by rubbing a cat's back is, of course, well known; it is also well known that this is frictional electricity, or, perhaps more correctly, the electricity of contact—that it is a surface effect produced by the rubbing, that it does not point to pre-existing electricity stored in the body of the animal and that the person who, having concluded a message, sinks into a chair declaring that his exhaustion is consequent on the loss of 'the living galvanism' which he has imparted to the patient is a charlatan.

"It is to be remembered that friction between any dissimilar substances always produces electricity, and in illustration of this the electrical effect sometimes produced in a dry atmosphere when the hair is combed on the body quickly divested of a flannel jersey may be instanced, or the classic experiment of rubbing a stick of sealing wax on a rabbit's fur may be called to mind. Those who are accustomed to rely on the curative effect of stroking a cat's back may find consolation in the last-named experiment, inasmuch as it teaches them that when their 'feline favorite' is no more health and strength may still be secured by gentle friction on its skin.

"Apart, however, from questions of electro-physiology it is instructive to learn that the presence of white in the color of a cat, unless the animal be whole-colored, is a sign of weakness.

A WONDERFUL LIGHT.

The idea of an electric light which, fed by a current from a dynamo actuated by a 40-horse power engine, and giving 7000-candle power, can have its illuminating power intensified 35,000 times, is not easy to grasp. It means the pro-

jection of a stream of light of about 250,000,000-candle power, and it is no wonder that the announcement that such a light is about to be used in this country has been received with some incredulity in Europe. Yet this is the efficiency of the light which will be shortly erected at Fire Island for the illumination of the adjacent coast and the protection of the fleet of ships entering New York harbor. A remote suggestion of the power of this lamp may be arrived at by bearing in mind that an ordinary oil lamp is about 38 or 40-candle power, and then trying to imagine the combined beam of 3,000,000 lamps. The ordinary electric street light may be put down at 100-candle power, and 250,000 of these would about represent the strength of the Fire Island light.

The most powerful oil lamp yet made is supposed to shine out on a clear night for a distance of 35 or 40 miles, but the new light will flash its welcome rays to the incoming European "liners" when they are 120 miles away. The light revolves rapidly, and throws out its beams with the intensity of speed of lightning. The motive power which actuates it is a simple clockwork arrangement contained in a box two feet square, and although the revolving portion of the light weighs 15 tons, the mechanism controlling it is so delicate that the pressure of two fingers will turn it. The value of this marvelous lamp can only be determined by practical working, but it promises to represent an immense stride in the science of coast lighthouse illumination.

ANTITOXIN FOLLOWING SCARLET FEVER.

Dr. W. S. Gleason, of Newburgh, N. Y., in an article entitled "The Use of Antitoxin in Diphtheria following Scarlet Fever," published in the "Medical Record" of November 10, 1894, states:

At this time, when, as a profession, we are awaiting with interest the effect of the use of antitoxin upon the human subjects, I feel that the following results should not go unrecorded:

On the morning of October 5th I was called to see John —, aged eight, a robust boy, son of vigorous parents. I found upon examination well-marked evidences of scarlet fever; temperature, 104 degrees F.; pulse, 140; upon my

evening call, temperature, 105 degrees F.; pulse, 144. The temperature, unless reduced by antipyretics, ranged between 104 degrees and 105 degrees F., with but slight variation between the morning and evening observation.

On the second day of the disease a fibrinous exudate made its appearance on both tonsils and pharynx, with intense tonsillar enlargement, and in spite of thorough pharyngeal disinfection there was great difficulty in swallowing. Gradually the appearance of the exudate changed, and upon the seventh day from the time of my first call I felt that I had a true diphtheria engrafted upon the scarlatina angina. Starr brings out the fact in his "American Text-Book of Diseases of Children." As we have not the means to make cultures in our city, I was not able to verify the presence of the Klebs-Loeffler bacillus. The temperature, if unrestricted, remained at 104.3-5 degrees F.; pulse, 150; glands of the neck enlarged, and an excoriating nasal discharge was present.

At three o'clock in the afternoon of October 12th I made my first injection of Aronson's serum, using twenty minims, followed by a second injection of forty minims in six hours. With close observation I could not appreciate the least reaction as an immediate result of the injection. Twenty-four hours from the last injection the temperature dropped to 99 degrees F., with a corresponding amelioration of the symptoms. There was an evening rise of temperature to 103 degrees F., but from that time, October 12th, to this date, October 23d, the patient has steadily convalesced, with no decided fluctuation of pulse or temperature. I combated the scarlatinal conditions with carbolicized inunctions to the body, lime-water and peroxide of hydrogen sprays for throat, and a judicious use of quinine and phenacetine as antipyretics. The diphtheritic manifestations were met with the same spray for throat, and bichloride irrigations, 1 to 1000, for both throat and nares. Internally, full doses of mercuric bichloride. For forty-eight hours preceding the use of the serum the heart flagged and required careful stimulation. The fact that within twenty-four hours after the use of the serum such a remarkable change took place proved to me conclusively that the absorption of septic material ceased at once, and produced a reaction not found in such intense conditions.